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THE RELATIONS OF RECENT PSYCHO-  
LOGICAL DEVELOPMENTS TO  
ECONOMIC THEORY

SUMMARY

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IN spite of several attempts made in recent years to improve upon economic theory by renovating its psychology, economists in general do not perceive that psychological debates are relevant to economics. They have not been convinced that any real economic principles have been invalidated by the "new psychology" that has been exhibited to them, or that the latter promises any profitable extension of the body of economic theory.

It is said, for instance, that the generalized man assumed by our theory, who was supposed to pursue his economic interests in usually reasonable ways, must be

superseded by the real man known to modern psychologists, the creature of unreasoning hasty moods and propensities to heedless action. Well, what of it? is the reply. Granting that people's wants are determined frequently by instincts, and often by imprudent ones at that — what change does it necessitate in economic principles? We do not need to account for the origin of wants; our business is to study the means of satisfying them, and the conditions under which they may be satisfied. An ordinary degree of foresight with respect to these means does not seem to be such a far-fetched assumption. The other objections have seemed to be as easily met, and on the whole, in the hearts of most economic students, no conviction of sin has been awakened, altho the "psycho-economists" have been pressing their attacks, in different quarters, for over twenty-five years.

Some of the skeptics suspect that the trouble arises from too exclusive attention being given by the innovators to the subjective, or mental elements of economics, and from a preoccupation with the exceptional or abnormal cases even in that limited field. Results so obtained, of course, would hardly call for a revolutionizing of economic theory as a whole. It seems to the present writer that much of the criticism from the standpoint of modern psychology heretofore made by economists is inadequate, both as to psychological facts and their applications to economics, and the object herein is to make it clearer where the psychological discoveries and economic theory do fit together.<sup>1</sup> But let us at the very beginning safeguard ourselves against material fallacy by giving the purely physical factors of economics their

<sup>1</sup> The present writer is preparing a thesis in which questions of fact in psychology related to economics are considered. The discussion in the present paper, however, is concerned only with the place which psychological data have in economics, assuming them to be true.

due — those which are stubbornly indifferent to human thoughts or preferences. Then we may consider some ways in which psychical forces coöperate with these external facts to produce the activities we study.

Whether we like it or not, as Mill said, “ a double quantity of labor will not raise on the same land a double quantity of food, unless some improvement takes place in the processes of cultivation.” And the principle of diminishing quota of “ overhead ” expense to the unit of product, as volume of output increases (the basis of “ increasing returns ”), is likewise simply a way *things* have of acting. So is the pure fertility of the human species, with its enormous potentialities for the destruction of men’s hopes. Whatever other factors may enter into the value of money, it seems clear that its quantity, by purely mechanical principles, must be a part of the explanation.

The superior productivity of labor which is specialized, moreover, and the gain in the efficiency of labor through saving and the use of tools or machinery, are not the projections of anyone’s mind, tho we may choose either to regard or disregard these facts. But having once chosen, we must take the consequences, and cannot change the results by wishing. If we decide to do without the capitalists, and do not otherwise provide for the saving of wealth, our society as a whole will have perforce to work harder for its daily bread. The foregoing purely objective observations we recognize as economic principles which Adam Smith, Ricardo and Malthus elaborated and stressed; and these contributions at least, must not be included among the “ tissue of false conclusions ” which the classicists are supposed to have constructed from false psychological assumptions.

To illustrate further: The “ law of variable proportions ” is a name given to an external fact which shapes

the world's values no less than do the reason and passions of men — the fact that in most productive processes, an increased use of one ingredient, all others remaining stationary, will result in a larger total product, but in a lessening proportion to the units of the ingredient which is being increased. If you are smelting iron, or making shoes, or growing wheat, you will find that increasing applications of coal or leather or labor, the other factors in the processes remaining the same, will yield less and less increase in the output of pig iron or shoes or wheat. The most advantageous combinations are based on natural laws, or "habits of matter," which our technology takes increasing advantage of (through processes in part psychological) but cannot change. Under no conceivable social arrangements can the superabundant elements be made as valuable as the less abundant, or limiting, elements.

Without attempting to enumerate the special physical, mechanical, geographical or biological facts and uniformities which economic science must use as presuppositions, there is still another sense in which economic principles are independent of human volitions. Economic theory treats of means of economizing, or using without waste, the limited resources which nature affords to satisfy men's wants. Men usually try to get as much coat as possible out of their cloth, and economics gives them some information as to how to accomplish that result on a large scale. They can accomplish it only by acting reasonably, it is true. But suppose you can point out a group of people who have irrational and uneconomic ideas which they prefer to follow: does that prove the theory to be unreal and irrelevant to actual life? Let us see. The Indians of Paraguay, according to the account cited by Mill, sometimes killed for supper the oxen which the missionaries had given them; "thinking,

when reprehended, that they sufficiently excused themselves by saying they were hungry.”<sup>1</sup> Their conduct was “natural” enough, but it was not “economic” — that is, it did not work economically. Since there are other peoples in the world who keep their oxen for work, and eventually need more land, there is every prospect that the Paraguayans will be eventually displaced by them. Hence the principles of economy are not exactly “idle tho true,” even if not practiced by every one.<sup>2</sup>

But the foregoing instances of the purely objective subject-matter in economics must have called to mind several psychological principles which are closely associated with such physical data as these, throughout economic discussions. We are accustomed to think of the Malthusian law of animal fertility in connection with the theory of wages, an essential part of which is the doctrine that human self-restraint keeps population within the physiological maximum in practically every civilization. It may restrain the increase only to the point where a very scanty subsistence can be earned by each man, or it may under certain circumstances maintain a much better “standard of living” by placing a sufficient check upon reproduction. Besides this, every theory of wages must make several further psychological assumptions concerning the motives to work and to idleness, the relations of differences in wages between occupations and within occupations to maximum effort; the theory of human nature implied in the concept of non-competing groups; the effects of various wage systems and of scientific management; the mobility of labor, how affected by “non-economic” motives; and so on. If we assume that men will, in general, work as effectively for a smaller as for a larger wage, our con-

<sup>1</sup> Mill, *Principles*, Bk. I, chap. xi, § 3.

<sup>2</sup> See remarks by Professor T. N. Carver along this line in “The Behavioristic Man,” *Quarterly Journal of Economics*, vol. xxxiii, pp. 195-199, November, 1918.

clusions will point toward the desirability of equal wages to all workers. In any treatment of labor problems and industrial peace, the other human nature elements are of course many and various.

Again, mention of the technical advantage of capital and the division of labor calls up many subtle discussions of the motives which induce and counteract saving, the "preference for present over future goods"; and we remember some questions about the motives which the business man has for buying the present goods, launching them into round-about production, and agreeing to pay interest. Some kind of subjective resistance against saving, which apparently has to be overcome by the payment of interest, has long been a fundamental assumption in economic theory; and most economists believe that the size of the anticipated business profits has something to do with the energy and shrewdness of the business man. It depends on our presupposition as to his motivation whether we consider his income above some wage standard as "earned" or as "rent" or "surplus."

And to the above assertion that external laws of nature prescribe the advantageous combinations of tools and labor, a "psycho-economist" might rejoin that these combinations are not to be taken for granted — they would never be realized but for human ingenuity, and that the currently accepted processes are in turn powerful institutions for molding the rising generation's ideas of natural law. It is true that invention, and the state and progress of the arts, are factors in wealth which the economist cannot help but take account of, and if he constructs any theory about them, it must be with the aid of psychological analysis. The "state of the arts" may for static purposes be assumed as an objective condition like the weather, but anyone who is inter-

ested in increasing social welfare and control over nature will not be content to stop there. He will ask how has progress in the arts been brought about in the past, and how can it be accelerated in the future? The patent monopoly system is based on a theory of inventive human nature; that men are more likely to contrive useful devices when they are assured of protection in reaping their benefits than when not. It was one of the projects Bentham thought most necessary for the improvement of human society.<sup>1</sup> Some modern theorists, with different presuppositions, class patent-monopoly gains as "unearned surplus" along with illegal monopoly gains. The question is, however, not solely what kind of motives actually control conduct, but partly, what kind of conduct controls the environmental factors most successfully.

It may even have seemed incorrect to speak of the "law of variable proportions" as a purely objective fact, so closely has it been connected in economics with the theory of value and the subjective elements thereof. The principle is referred to usually to show why the more abundant productive elements, of which more units would not make much difference in the output, inevitably have less value to the people who want the finished product than have the scarcer elements, of which more units would greatly increase the finished product. The laws of value are typical of that double dependence upon mental operations and physical conditions which characterizes so large a part of the subject-matter of economics. Altho scarcity of an object in the external world, relative to men's desires for it, is essential to its having economic value, yet such value is equally dependent on some one's wanting the object, and many of the actual phenomena of value are due to

<sup>1</sup> Jeremy Bentham, *The Rationale of Reward* (1830), p. 318.



differences in the intensity of wants which people have for different units of goods. The law of diminishing utility, a purely psychological postulate, giving greater precision to the tendency of exchange value of a commodity to decrease as the supply of the commodity is increased, has rendered very great service in economic analysis. If other equally regular principles could be discovered regarding the generation and mutations of the wants with which economic science starts, they might be equally useful, especially if we believe that a closer correspondence between actual consumers' wants and real needs is desirable.

When we proceed from utility to price, more psychology becomes necessary. Some further assumptions regarding the motives to competition and toward making provision for wants must be made. We usually assume the predominance of self-interest, so far as economic behavior is concerned; or we generalize that men strive to get the largest amount of material well-being for the least sacrifice; and of course we assume that men in general know their interests and the means of advancing them, in the existing state of the arts.<sup>1</sup> Wherever it appears that these conditions are not present, we make qualifications of the more general laws which do presuppose them.

There is one more group of subjects which illustrates the large part which presumptions as to motives play in economic investigations — the subjects of inheritance, monopoly profits, rents of natural agents, and differential gains of all kinds, with their related problems of taxation. Pure rent and monopoly gains are usually thought to be peculiarly fit objects of heavy taxation.

<sup>1</sup> See the discussion of premises in J. M. Keynes, *Scope and Method of Economic Investigation*, pp. 240-246; also chap. 4. The two assumptions just mentioned, along with the principle of diminishing utility, are considered the most important psychological postulates by the methodologists. Keynes mentions, however, a number of special problems where other psychical forces must be taken into account (pp. 129-134).

Why? Because the services for which they are paid are not the result of labor or saving on a competitive basis, and especially because heavy taxation will not lessen the supply of those services. The full amount which the traffic will bear need not necessarily be paid to the ownres of land or monopolies, in order that the community may get the fullest possible output. Herein seems to lie the vital distinction between such incomes and interest and wages. In dealing with the institution of inheritance, one of the chief questions is what rôle it occupies in inducing accumulation of wealth. The prospect of bestowing property upon one's descendants at his death is ordinarily supposed to be a strong motive for saving, and if estates were taken entire or taxed too heavily by the state, there would be less incentive to the owner to save, and more inducement to consume his property in his lifetime.

There is a third set of assumptions necessarily made by economic theory, not of physical or psychological laws, but of social facts having chiefly a mental origin; namely, the legal and social institutions, under which economic life is carried on. We must assume some kind of government which maintains order and enforces certain rules relating to property. What these rules are, may vary with different societies, and we may vary them in our hypotheses, with consequent variations in our conclusions. It is obvious that the production and distribution of wealth will take very different forms, according as distribution is on the basis of physical force, political competition, or economic competition under the institution of private property. The government, as Mill pointed out, might be considered a factor in production, since it is a labor-saving device. Hardly less pervasive in effect, through the "plane of competition" are the various customary codes of business and

professional ethics. All such institutions are human collective habits, based on unconscious custom or deliberate social will, and as we come to understand them better we are able consciously to modify them. The civil laws, of course, we are changing every day, and in the course of time the accumulation of such changes makes great differences in the economic situation. Custom and tradition are less amenable to voluntary refashioning, but "public opinion" can yet be influenced deliberately, by skilful appeal to popular sentiments.

Now, to consider the most probable effects on economic phenomena of the more plausible changes in governmental action, and in the other institutions which affect it, as well as conjectural changes in the arts, in population, and in the accumulation of capital, is the task of "dynamic theory" in economics.<sup>1</sup> The dynamic theory which considers institutional changes is obliged to pass some judgment as to the compatibility of such hypothetical innovations with human nature, of which more in detail later herein.

The foregoing, then, are some of the connections in which psychological postulates are used in economic theory. In this article we have not so far made any attempt to determine what are the most satisfactory psychological postulates in the various problems mentioned, nor have we attempted completeness of enumeration. The attempt was simply to make clear, by ample illustration, the point that many of the foundations of economic theory are secure against any possible fluctuations in the science of psychology; but nevertheless there are a number of the most important problems in theory which require psychological principles for their solution. We have thus tried to avoid the confusions

<sup>1</sup> See J. S. Mill, *Principles*, Bk. IV, chap. i; J. B. Clark, "The Future of Economic Theory," *Quarterly Journal of Economics*, vol. xiii, pp. 1-14 (1899), etc.

and errors which arise from any overestimation of either group of factors.

Another generalization may be hazarded. The psychology which is of use to economics is that which relates to the motives, or springs to human action.<sup>1</sup> In all the problems of theory we cited, the psychological assumptions were always as to what induces the human agent to work, to contrive, to save, to part with his goods. If we turn to the use of psychology in vocational economic fields, by the salesman, the advertiser, or the employment manager, we shall find it is the secret of arousing people to some kind of economic activity that is sought in each case. There are numerous technical problems subsidiary to motives, to be sure, with which the economist is concerned — the processes of choosing between one's wants, for instance, and of reasoning as to the means of satisfying those felt most urgently, or of arousing new wants in other people. But all these are included in the psychology of motives; and it is upon this psychology that we draw (from our own observations, or whatever other source) when we attack such problems as those in value and distribution which we have cited. Consequently it is only by adding significantly to our knowledge of motives that the psychologist can help us with our own theory; and here only so far as our explanations do imply certain incentives to economic conduct — not throughout the whole of economic theory.

Another useful preliminary will be a comparison of the terms "motive" and "cause." Since a motive may usually be described introspectively as an anticipation of a desired result, together with an apprehension of the causal sequence between some action in the agent's power and the desired end-effect, it seems that the

<sup>1</sup> Compare Professor Taussig, *Principles*, chap. 54.

future event in some sense *causes* the present action, and the ordinary temporal sequence between cause and effect is reversed. "Teleology" is apparently of a different order than "cause and effect," and in this distinction Professor Veblen has found an occasion for reading economics out of the ranks of the modern sciences. Its logic, he says, is that of "sufficient reason," and it has no room for the more pervasive law of causation.<sup>1</sup> This is to take what Professor Holt calls the "bead view" of causation, which has been discarded in physics — the view that cause and effect push one another along in fragments like marbles in a row.<sup>2</sup> The more accurate functional concept of causation is perfectly consistent with human purpose and foresight. The cause, in either case, is simply the object or process of which the other process (the human behavior) is some kind of constant (mathematical) function. The anticipated future satisfaction may be a part of the cause of today's labor, in that its realization is related to certain present signs which serve as the immediate stimulus to the laborer's activity. An unprejudiced view of motive, therefore, is the whole situation — that the man is prepared to execute some definite course of action with regard to some object or system of objects in his environment — his behavior is a function of that object.

An economic motive is one which results in behavior that affects wealth, or in economic activity; tho the wealth need not necessarily be the stimulus or even part of the stimulus. It is a commonplace, even in economic texts, that the economic motives are often very complex when one looks beyond the desire for wealth — we want a certain position not only for the larger salary, which will partly mean an easier time for our wife, but because

<sup>1</sup> T. Veblen, "The Limitations of Marginal Utility," *Journal of Political Economy*, vol. xvii, p. 623 (1909).

<sup>2</sup> E. B. Holt, *The Freudian Wish* (1915), pp. 157 ff.

we can live in the suburbs and appear to be getting on in the world and have Saturday afternoons off to play golf. Usually, possibly always, as economists we can safely shorten the expression and say "The man's motive is to make money"; but, as the writer hopes to show, the economist will gain numerous advantages from knowing as much as possible about the whole formula.

It is doubtless unnecessary to call attention here to the wider bearings which any real improvement of our knowledge of human nature has upon social welfare, altho it is hard to avoid being deceived by the abstract language of science into thinking of it as an "academic question." The economist, even tho he may have little taste for theory, will have no difficulty in visualizing behind the theoretical problems we have mentioned, such practical issues as tax systems, poor laws, judgments on trade policies, and all sorts of public regulations on business; such issues as state ownership of railroads or other means of production, and above all the old issue of collectivism or socialism. All these are argued partly upon rival theories of motivation, and in the question of socialism this element is especially large — what is constant and what is variable, and how is it variable, in human nature? <sup>1</sup> The competitive order is to be justified, if at all, upon the assumption that it provides the best stimulus to strenuous and economically directed efforts in that production of wealth which secures man's command over nature, at the same time providing the maximum of personal liberty. If that hypothesis is unsound, equal distribution must be the just one.

If we turn to the field of politics and government, we find questions of human nature as the inevitable legacy of Plato and his predecessors. Almost the chief problem

<sup>1</sup> See A. Wagner, *Grundlegung der politischen Oekonomie*, 3d ed. (1892), pp. 72 ff.

for schemes of international organization to keep the peace during the centuries has been — why do men fight? If we examine the fundamental differences of opinion in ethics and education, we shall find that most of them might be reconciled by an accurate knowledge of the original elements in motives, and the true principles of their development. At any rate, doubts would be removed as to the best *means* of increasing knowledge and moral or socially desirable behavior; while many of the apparent divergencies between the rival ultimate aims would probably disappear.

So far as psychology has really a place in economic theory, therefore, the results to which it leads us translate themselves into some of the gravest enterprises of life; and upon them the community does or should look to the economist for help. He is often despised, to be sure, as impractical, but he must comfort himself by the reflection that by investigations in “pure theory” time and effort are in the long run economized, because the undesirable results of some experiments which might be made in actual life (witness the Bolshevik laboratory) can be shown without the time and expense and misery of making the social experiment. It is about the same advantage that multiplication has over counting on the fingers — a short-cut through experiment.

The most severely practical man, of course, is a theorist, in that he constantly works with principles which he believes true without verifying them in every instance. The practical man, in deciding for himself what should be done about the railroads or some other problem, is guided by his working theory as to the general run of men's motives. If you ask him why he believes his own theory, he will say it is based on his own observation — he has not dealt with so many of his fellow-creatures for nothing. Doubtless there is much truth in this asser-

tion, but still, people do not realize how much the "common sense" of their time owes to the scholarly and advanced scientific views of a few generations before, which views are always, to a considerable extent, in harmony with everyday experience, but which are replaced by other philosophies that seem to account for still more of the facts. The conservation of matter and energy are common sense today, but in Priestley's time they were not. To a later generation the transmutation of elements may be common sense, founded on daily experience, as it was supposed to be in the days of the alchemists.

When we consider, then, the import which the real and elemental laws of human nature have (could they but be discovered) for our judgments and policies toward almost all our social institutions, we can better sympathize with the avidity with which both the lay and the scientific world seize upon any alleged discovery in psychology. The columns of stuff in the papers and magazines, and the somewhat more sober articles in the social science periodicals, applying in innumerable directions the teachings of James, McDougall, Freud, Binet and so on, are not to be ascribed merely to a fad. Many of them, no doubt, are improper applications of doctrines which in themselves are false; but such wide notice of these theories, purporting to explain human nature more accurately than had the philosophy or common sense of former generations, is perfectly justified by the great utility which more really accurate information on the subject would have.

We are concerned here with the importations of new psychology into economic theory. Our foregoing remarks as to the existence of a psychological content in theory and its implications are doubtless conceded to be true, if trite, but now we come to the real problems of



our paper. The issue is not, do we need *any* psychology, but do we need any *more* psychology, or any improvement on the psychology we are now using? "Some unsettled questions" are the following: Are the psychological assumptions which the prevailing economic theory makes sufficiently valid? Are they exemplified in the workings of real men's minds and in their choices; or, if not universally true, do they hold of a sufficiently large number of men to make them adequate for the economist's purposes? Or, if the assumptions now made are true as far as they go, can they be added to with profit to the science? More specifically, is there anything new in the science of psychology which necessitates, if true, any change in economic theory? If so, what is it and what changes does it imply? As was said at the beginning, many economists are unconvinced that such importations as have been made are necessary or useful.<sup>1</sup>

The course of the discussions on this point in economic literature is sufficiently well known so that the briefest chronological indication of it will be enough for present purposes. The German historical school began, soon after the middle of the nineteenth century, to dissent from the classical economists' assumption of self-interest in the pursuit of wealth as a general human characteristic, and they have gathered numerous adherents in other countries from that time to this. In the United States, after the marginal utility theory had been introduced, a discussion was started, apparently by President Hadley in 1894,<sup>2</sup> as to whether that theory, and perhaps

<sup>1</sup> See the vigorous review by A. C. Whitaker of Fetter's *Economic Principles* in *Political Science Quarterly*, vol. xxxi, pp. 430-444 (1916); and Professor Carver's brief article on "The Behavioristic Man" already cited; also citations of opinions that psychologizing is unnecessary for the economist in W. C. Mitchell's "Human Behavior and Economics," *Quarterly Journal of Economics*, November, 1914.

<sup>2</sup> A. T. Hadley, "Recent Tendencies in Economic Literature," *Yale Review*, November, 1894; H. W. Stuart, "The Hedonistic Interpretation of Subjective Value," *Journal of Political Economy*, vol. iv, pp. 64-84 (1895); Veblen, articles cited in next reference; Davenport, *Value and Distribution* (1908), and others.

the whole of economic theory, did not need considerable qualification or change of view, on account of the doubtful validity of its hedonistic psychological assumptions. Professor Veblen, in the later '90's and in subsequent years called the established body of economic science such names as "taxonomic" and "non-evolutionary" because of its alleged hedonistic psychology and teleological philosophy,<sup>1</sup> and he has during that time been demonstrating how "evolutionary" or "genetic" economics should be written.<sup>2</sup> In 1910 Professor W. C. Mitchell joined the attack on Veblen's lines, armed with the eminent English psychologist McDougall's dictum that "it would be a libel, not altogether devoid of truth, to say that the classical political economy was a tissue of false conclusions drawn from false psychological assumptions."<sup>3</sup> More recently there have been suggestions toward revamping economic theory by means of certain modern psychological principles from Professors Hobson, C. H. Parker, W. F. Ogburn, B. M. Anderson, Jr., C. H. Cooley, J. M. Clark, W. H. Hamilton and others. Professor Taussig<sup>4</sup> and some other eminent American theorists have recognized the important part which the psychology of instinct may play in certain economic phenomena — particularly in the contentment of industrial workers — but they have not seen that the cur-

<sup>1</sup> Thorstein Veblen, "Why Economics is not an Evolutionary Science," *Quarterly Journal of Economics*, vol. xii, pp. 373-397 (1898); "The Preconceptions of Economic Science," *Quarterly Journal of Economics*, vol. xiii, pp. 121-150, 396-426 (1899), and vol. xiv, pp. 240-269 (1900); "The Limitations of Marginal Utility," *Journal of Political Economy*, vol. xvii, pp. 620-636 (1909).

<sup>2</sup> *Theory of the Leisure Class* (1899); *Theory of Business Enterprise* (1904); *Instinct of Workmanship* (1913), etc.

<sup>3</sup> Quotation is from W. McDougall, *Introduction to Social Psychology*, 12th ed., p. 11 (1st ed. about 1908). Professor Mitchell's article was "The Rationality of Economic Activity," *Journal of Political Economy*, vol. xviii, pp. 97-113; 197-216 (1910). He has since written several articles on realistic psychology for economists. See his "Human Behavior and Economics: A Survey of Recent Literature," *Quarterly Journal of Economics*, vol. xxix, pp. 1-47 (1914), and "The Role of Money in Economic Theory," *Proceedings of the American Economic Association* (1915), pp. 140-161.

<sup>4</sup> *Inventors and Money-makers*, 1915.

rent economic theory needed revision in the light of it. A number of still other writers, including Professor Marshall, have gradually changed their phraseology as to utility so as to avoid the implication of a hedonistic account of motivation.<sup>1</sup> Professor Fetter has done this with quite an air of reform, but neither he nor the others of this latter group have made any substantial change in the economic analysis as a result. The prevailing attitude seems to be that so far, no results of psychological research have been brought into economic discussion which call for any radical revision of theory; and therefore we will use our accepted psychological postulates, which are abundantly verified by everyday observation, until the psychologist brings forth in convincing fashion some revision of them which will make a real difference in our theory.

In order to determine whether this conclusion is correct, or whether it ends the matter until a properly accredited psychologist appears with some more significant discovery, it is necessary to make an analytical examination of the general drift of the main criticisms and of the replies which affirm that no revision of economic theory is needed. The present writer believes that grounds will be shown for a further inquiry into the psychology of motives in the interests of economics, and perhaps some irrelevant points of the criticism can be eliminated from further discussion. The criticisms (and replies to them) fall into about six counts, five of which are based on relatively "new" psychology.

1. *The Hedonistic Foundation.* — The first point of criticism is that the hedonistic conception of "utility," the assumption that pursuit of pleasure and avoidance of pain are men's fundamental motives, and the ac-

<sup>1</sup> See citations of changes in Mitchell's article, "The Rôle of Money in Economic Theory" above referred to.

companying presupposition that men customarily reason out the means available to them for securing pleasure and act so as to get the maximum of it, must all be thrown into the discard, because of the doom pronounced on them by psychology; and consequently economists should get a better psychological content to put into their place. On this point the critics have been agreed, tho they have gone on to very different points of reconstruction. Psychological hedonism has been under the fire of ethical writers for centuries, but the way its "explosion" came about in the science of psychology seems to have been about as follows: The instincts, animal and human, had long been studied and admired, but psychologists considered them unimportant in adult life until about the last quarter of the nineteenth century. Then several psychologists and biologists, notably William James and Jacques Loeb, began to attach much greater significance to these unlearned acts and reflexes as keys to psychological explanation. They also noticed the mechanical and automatic character of habit, and its pervasiveness in all human and animal conduct. By 1890 James is publishing his great *Principles of Psychology*, wherein he discourses on the number and characteristics of the instincts he believes men to use throughout life, and on the similar mechanisms of habit. The neural basis of "ideomotor action" is a little vague, but here, he thinks, is another source of spontaneous, unreflective actions. And so, in his chapter on the Will, after admitting the usual force of agreeableness and disagreeableness in promoting behavior, he says:

So widespread and searching is this influence of pleasures and pains upon our movements that a premature philosophy has decided that these are our only spurs to action, and that wherever they seem to be absent, it is only because they are so far on among the "re-moter" images that prompt the action that they are overlooked.

This is a great mistake, however. Important as is the influence of pleasures and pains upon our movements, they are far from being

our only stimuli. With the manifestations of instinct and emotional expression, for example, they have absolutely nothing to do. Who smiles for the pleasure of smiling, or frowns for the pleasure of the frown? Who blushes to escape the discomfort of not blushing? Or who in anger, grief, or fear is actuated to the movements which he makes by the pleasures which they yield? In all these cases the movements are discharged fatally by the *vis a tergo* which the stimulus exerts upon a nervous system framed to respond in just that way. The objects of our rage, love, or terror, the occasions of our tears and smiles, whether they be present to our senses, or whether they be merely represented in idea, have this peculiar sort of impulsive power. The *impulsive quality* of mental states is an attribute behind which we cannot go. Some states of mind have more of it than others, some have it in this direction and some in that. Feelings of pleasure and pain have it, and perceptions and imaginations of fact have it, but neither have it exclusively or peculiarly. . . .

If in these our *first* acts pleasures and pains bear no part, as little do they bear in our last acts, or those artificially acquired performances which have become habitual. All the daily routine of life, our dressing and undressing, the coming and going from our work or carrying through of its various operations, is utterly without mental reference to pleasure and pain, except under rarely realized conditions. It is ideo-motor action. As I do not breathe for the pleasure of the breathing, but simply find that I *am* breathing, so I do not write for the pleasure of the writing, but simply because I have once begun, and being in a state of intellectual excitement which keeps venting itself in that way, find that I *am* writing still. . . .

Or what shall be said of a shy and unsociable man who receives point-blank an invitation to a small party? The thing is to him an abomination; but your presence exerts a compulsion on him, he can think of no excuse, and so says yes, cursing himself the while for what he does.<sup>1</sup>

No account need be given here of the development of these doctrines at the hands of McDougall, Thorndike, and others, for James's conception of instincts, emotions, habits as the prime movers to action, distinguishes the "functional psychology" which was the scientific basis of the economic critics' repudiation of hedonism. It is true that present-day psychologists do not use

<sup>1</sup> Principles of Psychology, 1890, vol. ii, chap. xxvi. Quotations made from the Briefer Course, pp. 445-447. As to the divorce of habit from pleasure-pain motivation, the same point is made by J. S. Mill, e. g., *Logic*, Bk. VI, chap. ii, § 4.

"pleasure" and "pain" in the inclusive sense of the older writers, since pain is now restricted to a definite sensation, coördinate with touch, taste, etc.; but the modern "feeling-tones" of pleasantness or unpleasantness, which coexist with most sensations, may be substituted without confusion for the older terms of pleasure and pain in discussions of motivation theory.

Now if instincts and habits cause human action in this unpremeditated way, and if the instincts are as various, and habit (or custom, fashion, etc.) are as omnipresent as these new psychologists represented, the critics reasoned, then it follows that man is not typically the rational being, acting for anticipated pleasant ends, that we had supposed him, and economic theory is seen to take a very incomplete view of the real process of economic behavior. This basis of criticism fitted in admirably with the agnostic views on business enterprise and consumption to which Professor Veblen had come from other angles, and so, by identifying the economist's concept of utility, sometimes with the consumer's personal "sensuous" gratifications, and sometimes with a broad social view of utility, he was enabled to argue in downright fashion that modern industrial activity, and especially business profits, bear little relation to the ultimate utilities which are being produced.<sup>1</sup>

Another objection to the hedonistic theory of motivation, which has been made by moralists from time immemorial, is based on the acknowledged existence of

<sup>1</sup> E. g., "The hedonistically presumed final purchase of consumable goods is habitually not contemplated in the pursuit of business enterprise. Business men habitually aspire to accumulate wealth in excess of the limits of practicable consumption, and the wealth so accumulated is not intended to be converted by a final transaction of purchase into consumable goods or sensations of consumption. . . . If, in fact, all the conventional relations and principles of pecuniary intercourse were subject to such a perpetually rationalized, calculating revision, so that each article of usage, appreciation, or procedure must approve itself *de novo* on hedonist grounds of sensuous expediency to all concerned at every move, it is not conceivable that the institutional fabric would last over night." Veblen, "The Limitations of Marginal Utility," *Journal of Political Economy*, vol. xvii, pp. 634, 636.

altruistic motives, in which the interests of other people than the agent, or the furtherance of some abstract ideal, are sought at the cost of the agent's own happiness. Economists are always reproached for their assumption of self-interest. But such objections are against the theory of universal egoism, not against universal psychological hedonism, and the two theories call for very different analyses. The man who sells all his goods to give to the poor may do so for the sake of the greater satisfaction or pleasure he obtains from doing it than he would from not doing it; or he may act in the same way impulsively, without the least thought as to how it will make him feel. What the external and social effects are, of egoism as compared with altruism, or the intermediate gradations, are of course open to non-psychological investigation. As Professor Carver says, there is little doubt whether the complete egoist or the partial egoist makes the better father and citizen,<sup>1</sup> but if we decided that we wanted to change people's motives in any respect, it would be useful to know something about the instincts or means of attachment of pleasure which make them act as they do.

The earlier attacks of the historical school on classical economics had been on the ground that the latter assumed a too universally selfish pursuit of wealth; their researches having shown that under other social institutions, other motives were stronger than this one is in modern commercial nations. This objection may best be considered later with another group relating to the effects of institutions.

The first effect of the psychological reaction against hedonism, above described, upon economic theory was criticism of the marginal utility theory of value.<sup>2</sup> Jevons

<sup>1</sup> *Essays in Social Justice*, chap. iii (1914); *Principles of Political Economy*, chap. iii (1918).

<sup>2</sup> See Hadley, *op. cit.*; Stuart, *op. cit.*, etc.

had rubbed in the hedonistic calculus in his presentation of the value theory, and the Austrians and other adherents of the theory spoke, as a matter of course, of the "pleasures" and "satisfactions" which valuable goods mean. Nice calculations of small quantities of utility or pleasure also seemed rather essential to the theory. Hadley's qualification to these assumptions was based more on his own observations as to the number of unreflective, customary acts in every-day life than on new psychology, but the functional psychology increased the doubts as to the generality with which deliberate and careful valuations are made, such as the marginal utility theory seems to call for. The heroic lengths to which the search for improved psychology to sustain economic explanation could go, is illustrated by Professor Whitaker, who relates that an enthusiast seriously argued to him that the motor-car manufacturer puts stronger and softer springs on his machines, not because of the expected utilities to the consumers, but for the sake of his "entrepreneurial self-realization."<sup>1</sup>

It was easy to answer the objections at this stage, and to show the independence of value or other economic theories from any assumption that men merely seek pleasure and try to avoid pain. All we assume is that men want *goods*, concrete objects and services. There is no doubt about that; and we simply take whatever wants may happen to exist, as our motivation premises. Very likely people want shotguns because of their hunting instincts, and prayer rugs because of their superstitious customs, etc.; but whatever their wants are, some kind of material means, or wealth, are required to satisfy them. Likewise we observe that people learn what are the means for encompassing their desires; and,

<sup>1</sup> Op. cit., p. 430. Marion Parris in a Byrn Mawr thesis, "Total Utility and the Economic Judgment" (1909) criticizes the psychology of economic theory from the self-realization point of view.



whatever the mental operations involved, they certainly do choose among their limited means so as to satisfy their most urgent wants. The ends may be instinctive or arbitrary, but the means are sought intelligently, economically. In the case of mechanically habitual acts, there was some deliberation at the time the habits were formed, and hence these were based originally upon preference among alternative courses. If the habits come to be unsuitable, through changes in the situation, and give strikingly uneconomic results, the agent is aroused to renewed deliberation and assertion of choice. Our theory is not dependent on any particular degree of rationality in the choices, nor on any special wisdom in the desires. Our "utilities" are not confined to sensuous satisfactions, nor yet to the wants which are ideal from the social point of view. The utilitarian psychologists and the classical economists never limited "pleasure" to sensuous personal bodily pleasure. All things which are in fact by mortals desired were considered pleasures by them, and their lists of desires read marvelously like the modern lists of instincts. The wants connected with ostentation, which Veblen has so well characterized, are amenable to our theorizing — in fact the critics themselves seem to consider these desires as among the strongest motives in the pursuit of wealth. As to rationality, we know that people usually are capable of following cause and effect in business far enough to see where they can get the most pay for what they have to sell. The kind of rationality which the critics accuse us of assuming is a complete knowledge of all facts in the universe, to which we plead not guilty.

As to our general theory of motivation, the reply goes on, all that economists ever needed to say is that most men try to get the largest possible amount of *wealth* for

the least cost, which assumption is borne out by observation, and has not been shaken by anything we have heard from psychology. No doubt some economists have said that men desire happiness or pleasure, but what we really presume is that men want wealth, which is the generalized means of realizing what wants as consumers they may have. In general, with regard to the qualifications of our assumptions necessitated by motives which do not express themselves in wealth-seeking, or by defects of knowledge of people's own interests, etc., these qualifications are usually such as cannot be reduced to any general principles, and the undue emphasis of them simply leads to agnosticism.

Therefore, say the defenders, the old, and rather convenient, hedonistic phraseology may be dropped from economics without impairing the validity of our analysis.<sup>1</sup> The present writer believes that modern psychological work, especially upon the "conditioned reflex," tends largely to validate the associationist and "hedonist" psychology, as well as to enlarge it; but that is a consideration beyond the scope of this paper.

2. *Costless Production.* — But these doubts reach deeper than the theory of value. They affect all problems of economic theory where principles of motivation are involved, especially those of distribution. The doctrine of motivation implicit in the classical and modern economics is that men in general seek the

<sup>1</sup> See Böhm-Bawerk, *Positive Theorie des Kapitals*, 3d ed. (1912), 2d half-volume, pp. 310-330, who answers the criticisms on value theory in this fashion; also Whitaker, op. cit., and Davenport, op. cit., who argue about as stated above. Marshall, *Principles*, Bk. I, chap. ii, explains the economist's treatment of motives similarly.

Most authors of economic principles, to be sure, do feel called on to give some account or analysis of the various human wants or motives, especially Continental writers. The Austrian Cuhel in 1907 published a fair-sized volume devoted to such classifications, explaining, as usual, that the ultimate force of wants is in the feelings of pain and pleasure. (*Die Lehre von den Bedürfnissen, Theoretische Untersuchung über das Grenzgebiet der Oekonomie und der Psychologie*, Innsbruck, 1907, 310 pp.) Wagner's long analysis of economic human nature is still one of the best in any scientific treatise (op. cit., Bk. I, Pt. I, pp. 70-136).

largest material gain for the least sacrifice, and that their knowledge of ways and means is such that, on the whole, in competitive activity they do accomplish what they seek. Labor is irksome, and this irksomeness can be overcome only by threats or rewards. If it should turn out, however, that men are pushed into productive activity from behind, by their nature, fully as much as they are lured from the front by their pay, then our economic explanations lose considerable of their cogency as well as much of their accuracy.

The critics could admit most of the foregoing reply, and still maintain that the fall of hedonism necessitates substantial readjustments in economics. The next point of criticism accordingly is that men want, not only goods, but activity. Work itself is a utility to them. So that economics, in reasoning that production hangs on the wants for goods, is again telling no more than a half-truth. The power of instincts and custom, or public opinion, should be utilized for inducing production and saving at less cost to society. Inequality of wealth can thus be mitigated by the prevention of the large prizes from piling up on people who have already more than they need. Inventors, artists, patriots, leaders of industry would do their best work, even if they received only comfortable living wages; it is in their nature to put forth ceaseless activity in those directions, because their springs of action "are wound up that way."<sup>1</sup> How absurd, then, to let them accumulate and dissipate big fortunes, because of their luck in possessing aptitudes which are worth so much to their fellow-men. Even the multitude of us, who do not have such full and free creative bent, do a great many things in which we have no pleasure or even would gladly avoid, just be-

<sup>1</sup> See Taussig, *Inventors and Moneymakers*, for a statement, tho not a defense, of this theory.

cause we don't want to seem "queer." We could be kept doing our best by public opinion and our own sense of good will, without being paid according to the pieces of work we turn out. Most of our capital, in modern times, is accumulated automatically, both by rich and poor, without conscious reference to the rate of interest. Hence modern psychology points the way to means of stopping the "rent" or "surplus" of natural ability or involuntary saving from going to people who do not require it to induce their contributions of services.<sup>1</sup> Such suggestions, of course, are common among socialists.

The reply is that *part* of the supply society wants, either of work or of saving, would doubtless be forthcoming if there were less reward than at present, or none at all; but not the whole amount would be had. It is true that some fish are caught and some chopping of wood done, just for the "fun" of the occupations; and much other production could be motivated by less reward than the producers get now. But the output of these enthusiasts would not go far toward supplying the whole community; in order to get the full amount desired, it is necessary to pay all producers or all savers the rate which we have to pay the most reluctant one. The most effective way we know to increase our stock of wheat or coal or pork, even in war-time, or to get loans to finance the war, is to offer a higher price for all units of the supply, tho that means abnormal gains to some producers. As to taking such differential gains by taxation, we can do that when the differences are due to differing expenses of production; but where the differences are in personal ability or diligence, it is impracti-

<sup>1</sup> Substantially this is the argument of J. A. Hobson, *Work and Wealth: A Human Valuation* (1914). Other theorists who believe capital is accumulated automatically do not usually draw the above inference, but it is inevitable. See Taussig, review of Kleene's *Profit and Wages*, *Quarterly Journal of Economics*, August, 1917.

cable if not unjust to bribe the unworldly performer less than the grasping one.<sup>1</sup>

Another line of reply is that if you subsidized these various artists with a comfortable living regardless of their products there would be no assurance that they would devote their talents to works that other people most wanted. When their subsistence depends on the salability of their products the resulting activity may be distasteful to the artists but it is more certain to satisfy the wants of a number of their fellow-beings.

3. *Industrial Peace*. — A recent variation in the application of the instinct psychology to economics, one which brings to bear the Freudian teachings, is the warning that economists should consider the effect of forms of industry upon the workers' fundamental instincts. When the work stifles these instincts and baffles their free expression, as for instance the specialized routine of semi-automatic machines defeats the attendants' creative bent, then the baffled impulses force their expression in violent outbursts, inattention, rebelliousness, sabotage. Workaday tasks may thus be the causes of innumerable nervous afflictions such as Freud has studied, leading to various forms of mania. It was contended that the waves of strikes and industrial unrest in the years 1915 and 1916 might be accounted for along these lines. If economists acquainted themselves with the nature of the important human instincts, therefore, they could give better advice on labor problems.<sup>2</sup> In similar fashion, other elements in the economic situation

<sup>1</sup> See Professor T. N. Carver, "The Behavioristic Man," *Quarterly Journal of Economics*, vol. xxxiii, pp. 195-199 (1918); and "The Place of Abstinence in the Theory of Interest," *ibid.*, vol. viii, pp. 40-61 (1893); also Professor J. M. Clark, "Hobson's Work and Wealth," review, *Quarterly Journal of Economics*, November, 1914. Marshall, *Principles* (6th ed.) Bk. IV, chap. iii, §§ 5 and 6, notes the existence of surplus to certain savers and laborers.

<sup>2</sup> See Carleton H. Parker, "Motives in Economic Life," *Proceedings of American Economic Association*, 1917, pp. 212-231.

might be considered as to their effects on people's instincts, in an estimate of their contribution to human welfare.

The answer is that such investigations are doubtless important, but they fall only to a very limited extent within the scope of economic theory. Economics must not be confused with the whole of social science and art, and as to the recent industrial unrest, we may believe that rising prices had a good deal to do with it.<sup>1</sup> Economists hardly need to be told now that there is no one specifically economic motive, and that the relations of employers and laborers are concerned with many other human factors than the rate of wages, but it is believed that this is a special phase of economic investigation which must be studied empirically.<sup>2</sup> The connection of the psychology of instincts with these problems, however, has been given attention by two of the most eminent American economists, outside their general treatises<sup>3</sup> and the presentation of it to the business and labor world is assured by students of labor problems.<sup>4</sup> Another prominent economist has published his own theory of the psychology of instinct and emotion, with side-views at the Freudian doctrines, without as yet drawing any social applications.<sup>5</sup>

Provided the instinct theories on which these labor welfare views are based hold their own in the psychological world, there is every reason to believe that a large and useful body of knowledge will arise, which may in

<sup>1</sup> Fetter, Discussion of Parker's paper, *Proceedings of American Economic Association*, 1917, pp. 231 ff.

<sup>2</sup> E. g., Keynes, *op. cit.*, chap. iv, § 3, and R. F. Hoxie's *Trade Unionism in the United States*, reviewed by Ordway Tead, *Journal of Political Economy*, vol. xxvi, p. 763 (1918).

<sup>3</sup> F. W. Taussig, *Inventors and Moneymakers* (1915); Irving Fisher, "Health and War," Presidential Address, American Association for Labor Legislation, 1918.

<sup>4</sup> See the recent book by Ordway Tead, *Instincts in Industry* (1918), which was inspired by Professor Parker's teachings.

<sup>5</sup> Simon N. Patten, "The Mechanism of Mind," *Annals of American Academy of Political and Social Science*, vol. lxxi, pp. 202-215 (May, 1917).

time find its place in economic theory. It is in too nebulous a state to do so now.

4. *Sums of utility misleading.* — Another criticism of the current economic theory from a psychological standpoint, which is not based especially upon new discoveries, is an accusation that many of the current statements of the marginal utility value theory are inconsistent with the psychology presupposed by that theory. We refer to the expositions relating to sums of utility, and the transition from individual utility scales to general demand schedules. Upon the principle of diminishing utility, the contemporary inequality of incomes among different people makes it impossible to assume that equal money demands in the market for commodities represent equal utilities to the various people who are demanding. Five dollars offered by a millionaire for a poodle's collar does not approach the utility of five dollars worth of flour to a laborer. So long as the discussions are confined to subjective *utility* schedules, or to general money *demand* schedules, the value theory is satisfactory to this critic; but when the notion is smuggled in that the dollars in the general demand schedules represent equal marginal increments of utility, and the inference is suggested that the present competitive system directs productive agents into making the goods which have greatest utility to the whole community, the critic does strenuously object. If incomes were equal, production would be turned away from collars for poodles and private yachts, and the multitude of expensive luxuries, toward things which have greater utility to poorer people. Cultivation by economists of realistic psychology would cause them to avoid any degree of speaking in such fashion.<sup>1</sup>

<sup>1</sup> See B. M. Anderson, Jr., and the writers he mentions: *Social Value* (1911), esp. chap. 5, and *The Value of Money* (1917). Cf. P. G. Wright, "Total Utility and Consumers' Surplus under Varying Conditions of the Distribution of Income," *Quarterly Journal of Economics*, vol. xxxi, pp. 307-318 (1917).

It is admitted that differences of wealth do, indeed, prevent us from arguing that competitive distribution necessarily gives maximum satisfaction,<sup>1</sup> but, since usually money events affect the various social classes in about equal proportions, a general correlation between dollars and utilities may be assumed. And, looking beyond the mere satisfaction of consumption to the motivation which it involves, we may find that the poodle's collar induces more productive effort for society in general than does the barrel of flour in the poor man's home. If it happened that a great manufacturer wanted an expensive and nearly useless summer home, and, if he could not have it, would rest on his oars instead of scheming how to make motor cars or shoes cheaper, the community as a whole may derive great utility from that summer house, through the services it motivates.

5. *Social Character of Demand.* — Returning to criticisms based upon non-hedonistic psychology, we find a line of social psychology criticism. This has its roots in the phenomena of instinct and habit, above alluded to; for tho the name "social psychology" embraces many wonderful doctrines, the chief terms of their explanations are inborn propensities and the power of custom to influence individual action. Imitation, suggestion, tradition, fashion, sympathy, emulation and the like are the entities we meet, and they are classified and pedigreed according to the author's apprehension of the fundamental tendencies. By means of these original or instinctive structures in the individual's mental apparatus, the psychic lives of all members of a society interact and mutually determine one another. The principles so worked out by social psychologists are used in this case to account for the stability and inertia

<sup>1</sup> E. g., Marshall, *Principles* (6th ed.), Bk. V, chap. xiii, § 5. Cf. *ibid.*, Bk. I, chap. ii, § 3; and Bk. III, chap. vi, § 3.



of economic demands, and more particularly to make the point that demands are instilled into the single person by the group of people whose lives in any way touch his. Demands for economic goods are instilled partly through the moral, legal or aesthetic "values," which are swayed, in any individual, by the whole thought of his group. The extent of rational action by the individual, with reference to the actual effect of material goods upon his personal welfare may also be discounted on the same grounds. The supposition that the individual best knows his own interests, and the means of realizing them, tends to be discarded. Sometimes the assertion is made that a man's choices and behavior are entirely at the mercy of the social and material environment into which he happens to be born.<sup>1</sup>

The criticism is then made that the prevailing economic theory is based on a monadistic psychology; each consumer developing his own wants independently, and carrying them about in a suggestion-proof container; and it therefore considers social phenomena as the mere summation of individual choices. But the single person's choices are so swayed, even in the marketplace, by suggestion, by what he thinks other people want, that we must consider market value to be a social choice; the value set upon goods by the whole interacting social mind. This conception is supposed to account for sudden variations in objective or market

<sup>1</sup> "Scientific knowledge of mental and physical health . . . is undermining the idea that each individual is the best judge of his own desires . . . [the individual] can make nothing out of the world that the world does not first make out of him; he cannot even desire of the world, save as it has taught him to desire. He is limited by the range of stimuli that have come within his experience. He is at the mercy of whatever system he happens to be born into for creating, transmitting and directing stimuli. The slum tenement, the hill farm, the school, the church, the newspaper, the advertisement . . . all are parts of this system which determines men by determining the stimuli to which they are exposed." J. M. Clark, "Economics and Modern Psychology," *Journal of Political Economy*, vol. xxvi, pp. 6, 11 (1918). Professor B. M. Anderson also teaches that "the individual" is a misleading conception, since he is so largely a social product. The writings of Professor C. H. Cooley on social psychology have been very influential in impressing this point on a group of American economists.

values, in panics, booms, fashion epochs, which are incomprehensible in terms of the little units each calculating private utilities.<sup>1</sup>

Moreover, it is said, since the influence of deliberate suggestion is so strong in molding demands (witness the various businesses of promotion, salesmanship and advertising), economics needs a "theory of economic guidance," or of direction of wants, showing how actual wants may be made to coincide with real social needs.<sup>2</sup> Of course such a theory of guidance must be based on the best attainable social psychology.

The reply to this line of criticism is that such social influences affect economic values and behavior, only through the objective choices of individuals, and they are thereby brought within the range of ordinary value theory.<sup>3</sup> Suggestibility may be a powerful agent in determining choice; tho doubtless much of the so-called suggestion is merely enlightenment as to opportunities for securing satisfactions. No one doubts that choice depends upon knowledge of the means of getting utilities. It is questioned if the mature person's wants (which are those affecting economic matters) are as much the prey of suggestion, or if the ordinary man is as much of a jellyfish, as the critics make out. As to the guidance of wants, religious and moral leaders have always made that their business, and they will undoubtedly use the best psychological light they can get.

6. *Institutional Economics*. — We are now better able to appreciate the nature of Professor Veblen's criticism, made twenty years ago and repeated at inter-

<sup>1</sup> B. M. Anderson, Jr., books cited, and "Price-Fixing and War Finance," *Proceedings of the American Economic Association*, 1917, pp. 240-242.

<sup>2</sup> The second, or constructive, part of Professor J. M. Clark's paper cited above, on "Economics and Modern Psychology," outlines a "theory of economic guidance." *Journal of Political Economy*, vol. xxvi, pp. 136-166.

<sup>3</sup> See R. B. Perry, "Economic Value and Moral Value," *Quarterly Journal of Economics*, May, 1916.

vals since, that economics is "non-evolutionary" and "taxonomic"; and also the more modern demand for an "institutional economics." Veblen's arguments are never easy to follow: these on genetic economic theory seem to be among his most obscure. And the papers of Professor W. C. Mitchell,<sup>1</sup> making much the same arguments, tho clearer, are not generally well understood. Since the preliminary step of this line of objections is to accuse current economic theory of hedonism, the latter's defenders have considered themselves done when they proved their independence, by showing that they assume only the facts of choice, and care nothing as to why the choices are made.

Veblen admits, however, the effectiveness of the current theory for most of the purposes to which it is so far put. What he says to us in effect is this:<sup>2</sup> You are doing fairly well what you undertake to do, in spite of your bad psychology, but you are not undertaking enough. Your theory shows how whatever choices happen to exist, work themselves out in the modern business world, taking all its conventions and arts for granted. The hedonistic manner of calculating utilities happens to be much the same as the business style of calculating profits, especially in the processes of production (tho the scheme has little exemplification in consumption), and so you have not gone so far wrong as you might have in a science of business.

But with your old hedonistic preconceptions you will never get any further than things as you find them. Any predictions you make as to the effects on economic phenomena of certain arbitrarily supposed states of the arts or social or governmental conditions (for example,

<sup>1</sup> Especially "The Rationality of Economic Activity," *Journal of Political Economy*, vol. xviii, pp. 97-113, 197-216 (1910).

<sup>2</sup> See his three articles cited above: "Preconceptions," "Economics not an Evolutionary Science" and "Limitations of Marginal Utility."

different institutions as to property), are well-nigh worthless because you suppose men primitively and intrinsically to be the shrewd and rational economizers that you find in the modern down-town office. Your conjectural history of savages swapping nuts and apples according to marginal utility calculations, and your expositions of economic principles in terms of psychic income, are the fruits of this delusion. If you had cultivated better psychology and anthropology, you would know that people's decisions are not determined, except within very wide limits, by considerations of the primitive or absolute pleasure pain utilities, or by unbiased reasoning as to the properties of external goods in relation to men's wants. The "facts of choice" at any time depend chiefly upon men's native instincts interplaying with the great body of customs and current technology and common-sense philosophy that have been handed down to them; above all by the kind of prowess held in most esteem. The very capacity for reasoning and calculating in economic affairs, which you suppose to be innate, is the product of the more refined perceptions of economic cause and effect that are made possible by the use of money.

You admit that our constant associations with money values in business life cause us generally to think obviously expensive things more beautiful than inexpensive things, and to pay more respect to wealthy neighbors than to poor ones. We are constantly buying things we don't need because we find them going at a bargain. Yet you fail to see how manifold are the other ways that our culture colors and directs our ways of thinking. The technical processes you see about you, the government and business usages now in vogue, came about in some way that you leave to others to explain, and into them you fit your cunning welfare-desiring

savage. And you suppose that into any future society, under other laws, *mores* and arts of workmanship, the men of that time would bring the same processes of valuation, the same enthusiasms and utilities, the same standards of what is reasonable and efficient and worth while that the men of today possess.

The upshot of it all is that your help in guiding the community's economic affairs will never begin to realize its possibilities until you reach a more complete understanding of economic activity; which understanding must include a knowledge, derived partly from modern psychology and anthropology, of how institutions and the basic instincts mold the industrial routine, and how the latter becomes in its turn an institution which helps to mold the mind of the rising generation. This is the cumulative sequence or evolution in economics, comparable to the evolution which other modern sciences study in their fields.<sup>1</sup>

In some respects, the historical school's criticism of classical economics was in this same vein — alleging an underestimation of the force of custom, convention and other motives beside that of making the most money for the least effort. Knies said that universal altruism was as valid an hypothesis as universal egoism; and Frederic Harrison in England reminded the classicists that

In vast permanent societies in long ages of history, populations such as the Egyptian and Indian, under a strict caste system have shewn an astonishing degree of industry, directly stimulated by habit, social feeling and religious duty; and in a very slight degree by personal desire of gain. In religious societies, under very different kinds of faith, very active industry on a scale quite decisive as an experiment has been stimulated by purely religious motives. Some of the most splendid results of industry ever recorded — the

<sup>1</sup> Professor W. H. Hamilton has also argued that theory should take this turn. See his "The Price System and Social Policy," and "The Place of Value Theory in Economics," *Journal of Political Economy*, vol. xxvi, pp. 31-68, 395-400 (1918). Professor J. M. Clark's article above quoted leans in the same direction. W. Sombart's work is a partly theoretical account of the evolution of capitalism.

clearing of wildernesses; vast public works such as bridges, monuments and temples; the training of whole races of savages into habits of toil — have been accomplished by purely religious motives by monks, missionaries and priests.<sup>1</sup>

Opposed to such persuasions is the contention (substantially that made by Mill) that our great aim at present is to analyze the economic order we are now living in, with human nature as we know it. This task is sufficient to occupy us for some time, and it is more important than is worrying about what primitive man may or may not have done.<sup>2</sup> Whoever understands the economic forces at work in our own day will not have difficulty in deciphering those in other forms of society. Our assumptions, of men's efforts to get the greatest wealth for the least sacrifice, rationality in the application of means to this end, diminishing utility, etc., are sufficiently true of the general run of people in the modern states; and we have not had to wait on the development of the whole formula of economic progress before being able to give quite helpful advice upon such things as railroad rates, the currency and the tariff. That ambitious enterprise, the complete theory of economic development, will come when more is known about the whole process of social development; our present theory will undoubtedly fit into it quite as well as Veblen's demonstrations of genetic economics.

It is further urged, on the other hand, that the current theory is already an evolutionary theory, since the long-run survival of a nation depends upon its material progress, and since economic science throws light on the

<sup>1</sup> Quoted in Keynes, *op. cit.*, note, pp. 133, 134.

Another Lewis Carroll might, indeed, work out a system of economics based on the assumption of universal and complete altruism, exhibiting the "trust" as a benevolent institution for relieving unfortunates of the root of all evil, and representing bargaining as a process of accommodating the other fellow by taking off his hands the care of his possessions.

<sup>2</sup> J. S. Mill, *Logic*, Bk. V, chap. ix, § 3; T. N. Carver, *Distribution of Wealth*, Introduction; J. M. Keynes, *op. cit.*, pp. 166 ff.

most reasonable and efficient use of limited natural resources. It does not matter so much what any people's actual instincts or wants are, as that they manage to control their impulses, and act more efficiently than their competitors. Reasonableness is a great weapon of survival, in the natural selection of peoples. Granted that large societies have existed at various times, built on religious or customary motives, where are those societies now? They are not inheriting the world as are the peoples who have adopted the system of competitive liberalism. Rationality may be partly a product of social evolution, but from this time on, any group that tries irrational variations will do it at their peril.<sup>1</sup> The same sort of reasoning vindicates the assumption of moderate self-preference in the pursuit of wealth, aside from the overwhelming testimony of observation that in business dealings practically all men do want to make as much money as they can.

So much for the main lines of criticism on psychological grounds. The plausibility of the replies shows at once that psychologizing is not so imperative for the economist as it is sometimes represented. The hedonistic explanations which were formerly used by the classicists, and by nearly all economists until recently, are seen to be unessential to the economic theories they were supposed to have supported, and they have been dropped from recent writings, without damage to the economic doctrines themselves — at least in their static aspects. We can take as our ultimate data on the side of demand the "facts of choice," which account for the values of different goods, and assume through our own societies a universal moderate degree of self-preference in the accumulation of wealth (which, on account of its

<sup>1</sup> See Carver, "The Behavioristic Man," cited above. Cf. Walter Bagehot, "Preliminaries of Political Economy," in *Economic Studies*, p. 80 (1880).

interchangeability, satisfies the most diverse instincts and habits), and we need not inquire further into the psychological principles which determine that the choices shall be what they are. The pleasure and pain phrases were perhaps consciously used by the older writers just for purposes of convenient exposition, not for premises of investigation; in any case, the supposedly "first principles" of any science are likely to be less secure than its body of more particular propositions, because the former are usually formulated long after the latter.

Nevertheless the psychology of motivation may with advantage be cultivated by economists for the following reasons:

Altho the *process* of valuation which the marginal utility theory describes doubtless does not depend upon the causes of the ultimate choices, yet that process is a purely psychological one, and the economist's account of it should be in close harmony with the psychologist's conception.

Moreover, the great theorems of distribution, and even of production, as we have indicated, contain predictions as to human motivation which give them much of their significance. It may be that these predictions are also independent of the reasons for ultimate choices, but let us, for illustration, examine the connection of the psychology of motives with the specific productivity doctrine in its most general form. Veblen calls this "a theory of valuation, and hence only of distribution," but it is a partial theory of production also, since it tells why land and labor are devoted to producing certain things, wheat, for instance, and not certain others, ragweed, for instance.

The specific productivity theory is often criticized on the ground that it confounds the right of appropriation,



under certain property assumptions, with the principle of physical causation. To show that, under free competition and private property, the owner of one of the scarcer necessary elements in production can *appropriate* a larger share of the product than the owner of one of the more abundant, is not to show that the total product was physically *produced* by the joint elements in the ratios which their remunerations bear to one another. As Professor Clark admits, when you get down to one man sawing wood, it is hard to apportion responsibility for the cutting between the man and the saw. Water is as necessary to the fattening of a hog as is corn, but in the specific productivity formula, the increased weight is produced by the corn alone. And so on.

But such criticisms arise from unfortunate statements of the theory. What its proponents mean is, that the consumers who want more of any product, say of pork, are not so much concerned with the physics and chemistry of the fattening process as they are with finding what factor is, by its scarcity, holding up production, and with securing more of that factor. If we can get more corn, we shall have more pork; no more corn or similar feed, no more pork, tho we get oceans of water. Economically, the corn is the one thing necessary, the economic cause, if you like, of the larger amount of pork we want. For this reason we are willing to give up something valuable to get more corn, whatever may be our social institutions; but we will not pay anything for more water. In this way, any part of the utility of the finished product may be imputed to the elements necessary to produce it, according to their relative scarcity.

But is its utility the only reason why we *pay* more for the corn than for the water? So far as our society is

rational, it is not. If neither supply can be changed by human efforts, there is no good reason for allowing an owner to appropriate the corn and charge us for it what the traffic will bear. We expect to pay higher for the scarcer materials in most cases because the supply can be increased by human efforts, and because those efforts will be more strenuous, the higher the pay. And these efforts will be directed to producing the materials which are scarcest, relative to the needs for them, because for such will the highest rewards be offered. That seems to be the common sense of the specific productivity theory. It is of little significance aside from its theory of motivation.

In order that it may be used to justify private property and free competition to the fullest extent, on the ground that under these institutions the community's productive resources automatically are devoted to supplying the goods which are most urgently wanted, it is necessary to assume that the larger money offer always means the greater human want. What qualifications of this assumption may be necessary is a psychological question, as we have seen.

But in order that the theory may have any social interest at all, the assumption must be made that the more pay you offer men for a given product, the more of that product they will manage to supply you. This is the "utilitarian" theory of motivation. The propounders of specific productivity usually apply this theory of motivation to human, as well as material agents, assuming that a relatively high level of wages in any occupation attracts numbers of workers into that occupation, by means of larger families within its ranks, or by greater efforts among members of other ranks to give their children or themselves the necessary training to enter the first, until equality of wages between occu-

pations is secured. Of course the "utilitarian" theory of human motivation is not the peculiar property of the specific productivity theorists, it is assumed in all the most important explanations and advices given by economists of all persuasions. There is no doubt that it is sufficiently life-like in modern society to make our explanations in the main sound. But if there are psychological possibilities of withholding an "unproductive surplus" which it is not necessary to pay, to induce certain personal services, as critics claim, that is worth looking into. We now admit rather generally that there may be more economical methods (to society) for inducing the services of natural agents and monopolies than that of paying the owners who have been allowed to appropriate them, according to the full marginal utility of the agents' services; and perhaps the same principle might apply to capital and to the rarer personal abilities — if there really are no marginal savers, and if the creative impulses are so strong.

Of course we may be convinced that the "utilitarian" assumption is true of the race of men we know, and of that which the world has always known. For purely static purposes we may take it as a "fact of choice," and refuse any psychological ministrations from the institutional economists, with their jargon of "pecuniary culture," "prescriptive authority," etc. Yet we are rather intrepid if we project such assumptions into the future, and insist that psychological research can never throw light on the question of what human nature might become under other institutions than those of the present or of the past. It may be there is no possibility of other perfectibility in mankind than in knowledge, which will be used in the service of cunning, but if we have any appreciation of the strength of custom and public opinion, we shall want to consider the psychol-

ogists' dissections of habit and instinct, in our estimate of the future.<sup>1</sup>

A multitude of dynamic propositions at once more immediately feasible and more fundamental for social improvement, however, await upon a better knowledge of human nature than economists generally now possess. Such are those involving education of consumers' demands, the stimulation of productive effort, and the avoidance of standards of consumption which are futile or harmful. If all people chose spontaneously to spend their incomes in the directions which are, in the long run, most beneficial to themselves and everybody else, the millennium would be realized under the competitive order. All would work out according to the specific productivity ideal. And likewise in a collectivist society production and saving would be ultimately determined by consumers' (voters') demands, and so the millennium in this case too depends upon better standards of consumption. Very likely the luxurious demands of the rich would not divert so much productive power away from necessities in such a state; but most of us, socialists as well as liberalists, will admit that the masses' individual demands need considerable improvement. If we desire — not necessarily as economists, but as men having the social welfare at heart — to do some-

<sup>1</sup> The Comtean "hierarchy of science" supplies an interesting side-light at this point. The sciences, as Comte showed, may be arrayed in simple to complex order, corresponding to the relations subsisting in their subject-matter. If we start with the mathematical and logical sciences as the "lower," and proceed through the physical, biological, psychological and social sciences, we shall notice that each science for its completion presupposes most, if not all, of the results of all the other sciences "below" it, but none of the laws of sciences "above" it. We believe that neither Comte nor anyone else ever supposed that much fruitful and exact work in any of these fields must await upon any particular degree of completion of the simpler fields; but it is useful to remember this relationship, which signifies that any well-authenticated discovery in a simpler field, which is inconsistent with an assumption in one of the more complex, makes necessary the revision of the latter so as to harmonize with the former. Psychology, for example, must adjust itself to all facts of the physiology of nervous tissue.

This application of the Comtean formula was made by Richard Jennings, in his *Natural Elements of Political Economy*, London, 1855.

thing effectual toward improving consumers' demands, we shall learn what we can about the psychology of wants. We shall go to the roots of customs, institutions and the other social influences, and by understanding the source and extent of their power over us, shall learn to harness that power toward making nature supply more freely the materials for realizing our ideals. Such study may not be economics, but it is certainly part of the social physiology which must be developed before social medical treatment can be most efficiently administered. It is one of the fundamentals of the theory of welfare as related to wealth, which nearly all economists feel bound somehow to consider.

The suggestion mentioned above, that current theory is sufficiently dynamic, because it simply works out principles of reasonable and economical use of resources, which must be conformed to if the group is not to be ousted from the world by another group which does conform to them, must be borne in mind lest we make our theories too comfortably humanistic by overlooking the stonewalls of fact which we are about to bump our heads against. Altho correspondence to existing human nature is not the last criterion of economic theory, yet human nature is one of the elements which our active adaptive process has to work with, in adjusting our society to its physical environment. The best possible institutions (which we may have some hand in framing) must have a double adjustment — to the nature of man and to the nature of the physical universe. Our bodily structures also may not be as adaptive as those of some of our competitors, but in order to improve them, we must know the principles upon which they are organized.

And so our tentative conclusion is that an accurate knowledge of the psychology involved in economic behavior is needed in economic theory, not so much for

static as for dynamic purposes. It is needed for static theory if we want to be assured that our static theory is as complete and fundamental an explanation as the existing state of knowledge permits. But it is vital for dynamic theory, which looks beyond the existing conditions of wants, social structures and industrial devices, and prophesies what *would be* the result of various supposed innovations, if they were made. In this same fashion we have long predicted the probable results of hypothetical taxes and tariffs on production, distribution, etc. If we can set up hypotheses as to ways of changing consumers' demands, or producers' springs to action, which psychological science shows to be plausible, and trace their effect on economic life, we shall be adding to the purely scientific theorems which the legislator or reformer may find helpful. And aside from the possible applications to pure economic theory, such knowledge of motives is bound to be useful in the practice of social art.

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